ABSTRACT:

SYSTEM AND METHOD FOR HIGH PERFORMANCE DATA STORAGE AND RETRIEVAL

A new storage system architecture is described that satisfies the requirements of high availability and high performance. High performance is achieved by utilizing both parallel RAID data paths to disk and a split read and write cache. The read cache is associated with a host interface controller and the write cache is distributed over independent multi-ported write cache controllers operating within a battery protected power domain. Disk and write cache failures are survived through disk redundancy; controller redundancy provides system level survival for system faults. The system is therefore tolerant of both component and power failure, including combined component and power failure.